

Fig 1(a)

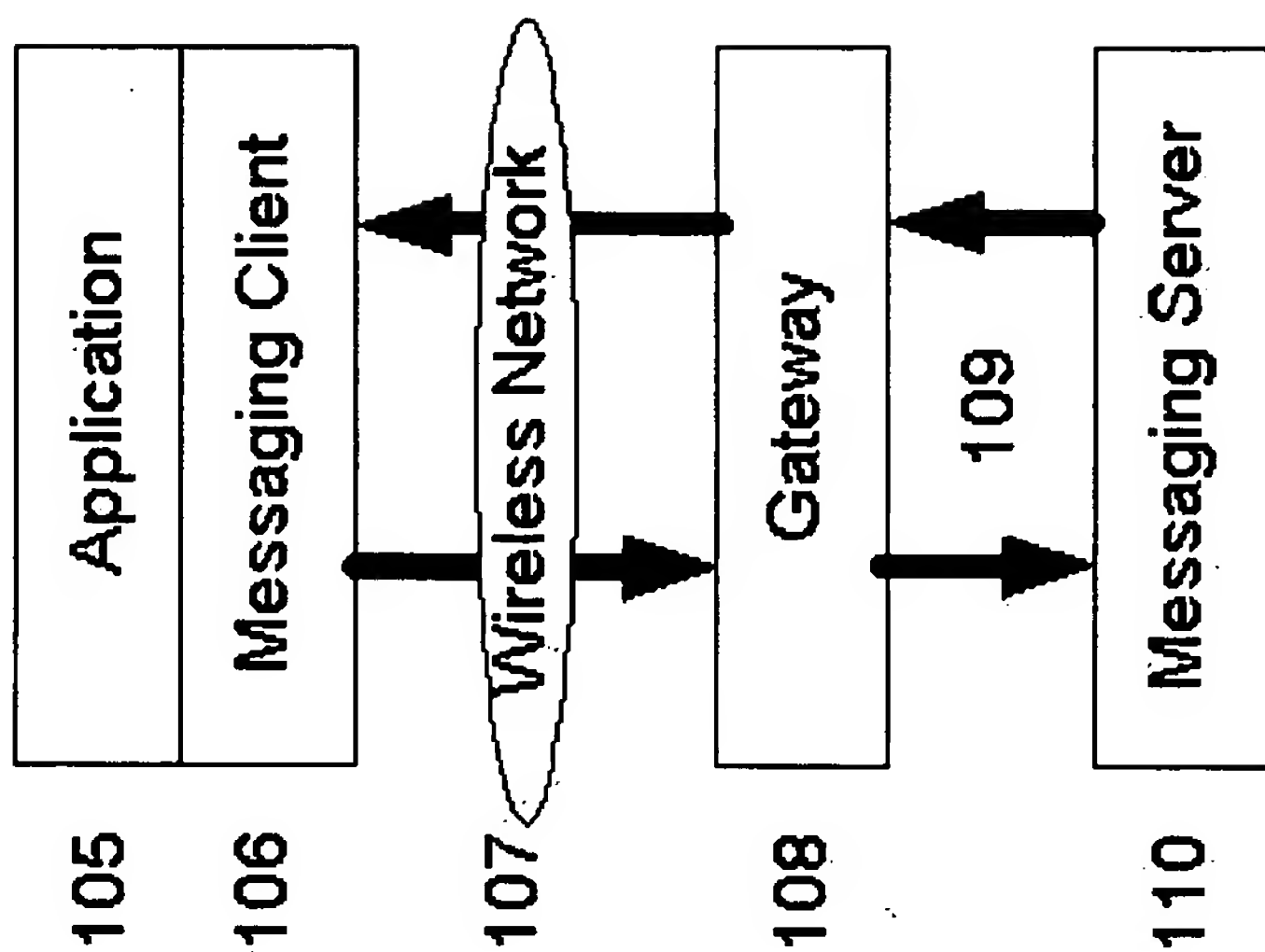


Fig 1(b)

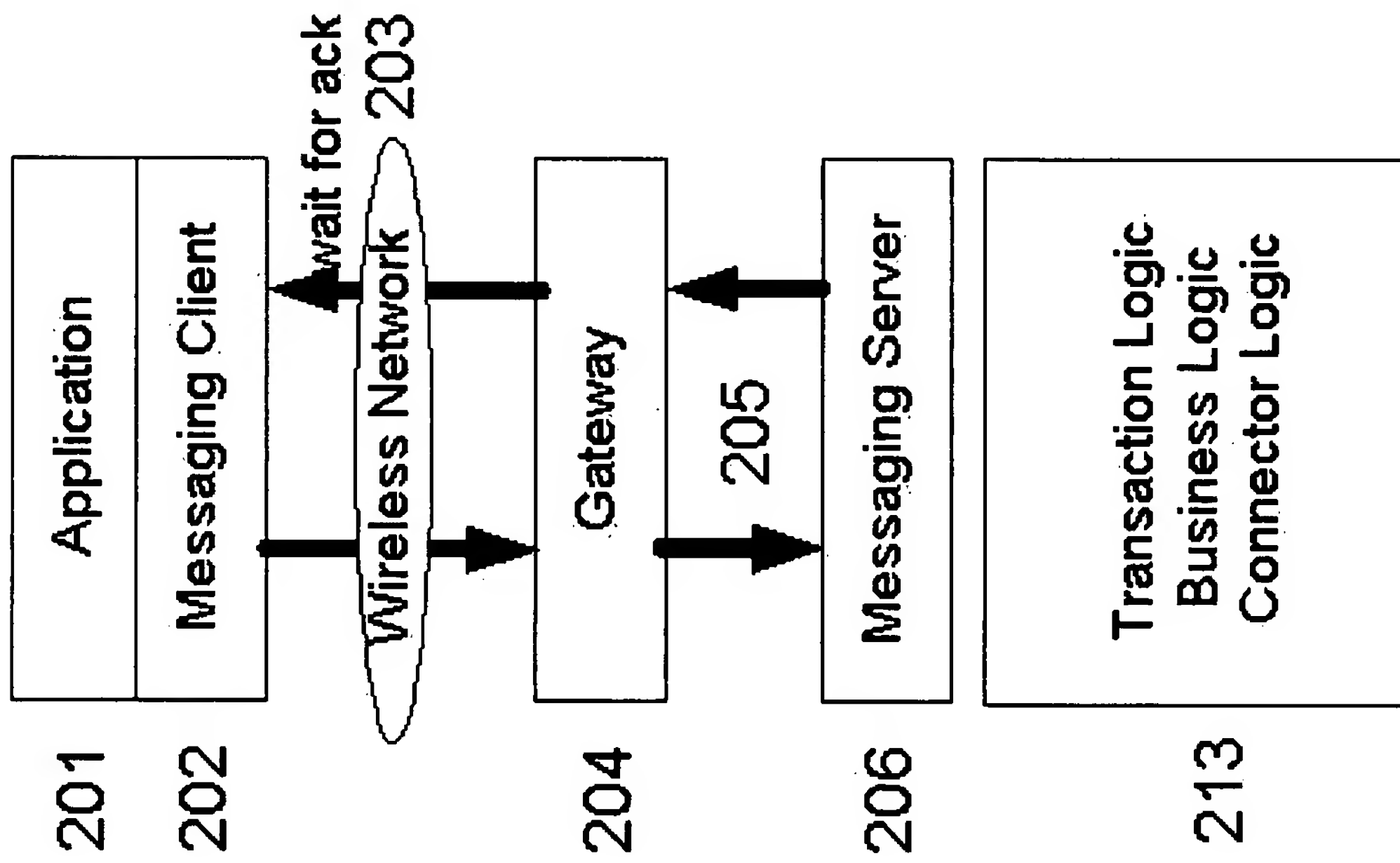


Fig 2(a)

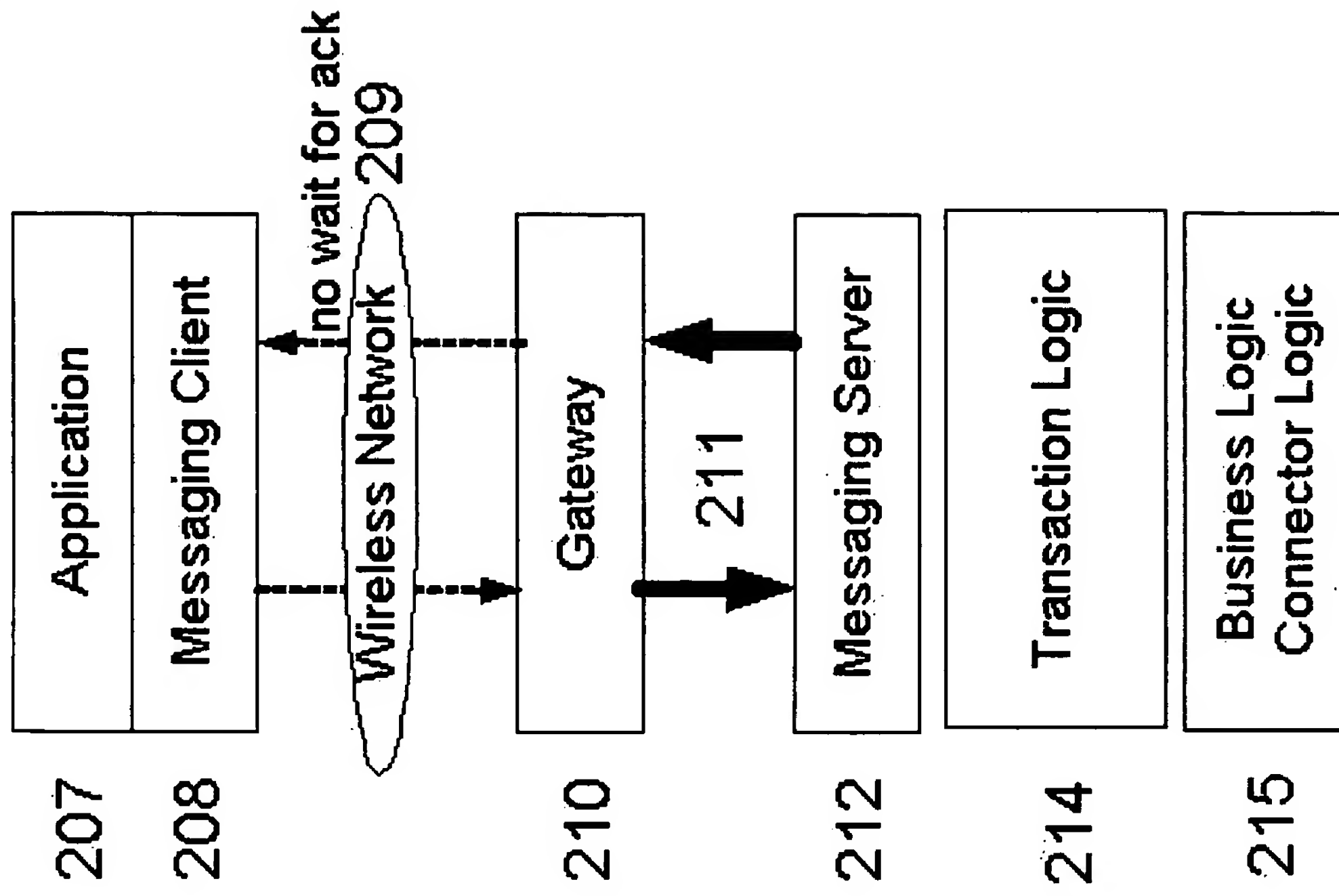


Fig 2(b)

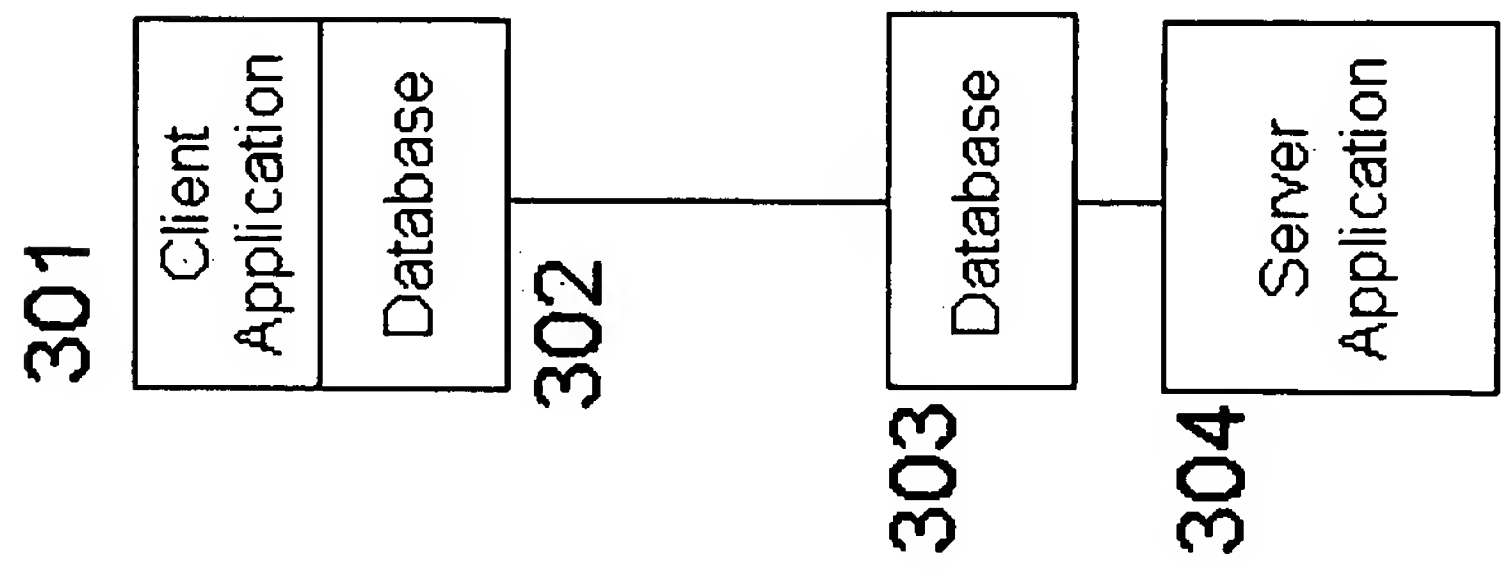


Fig 3(a)

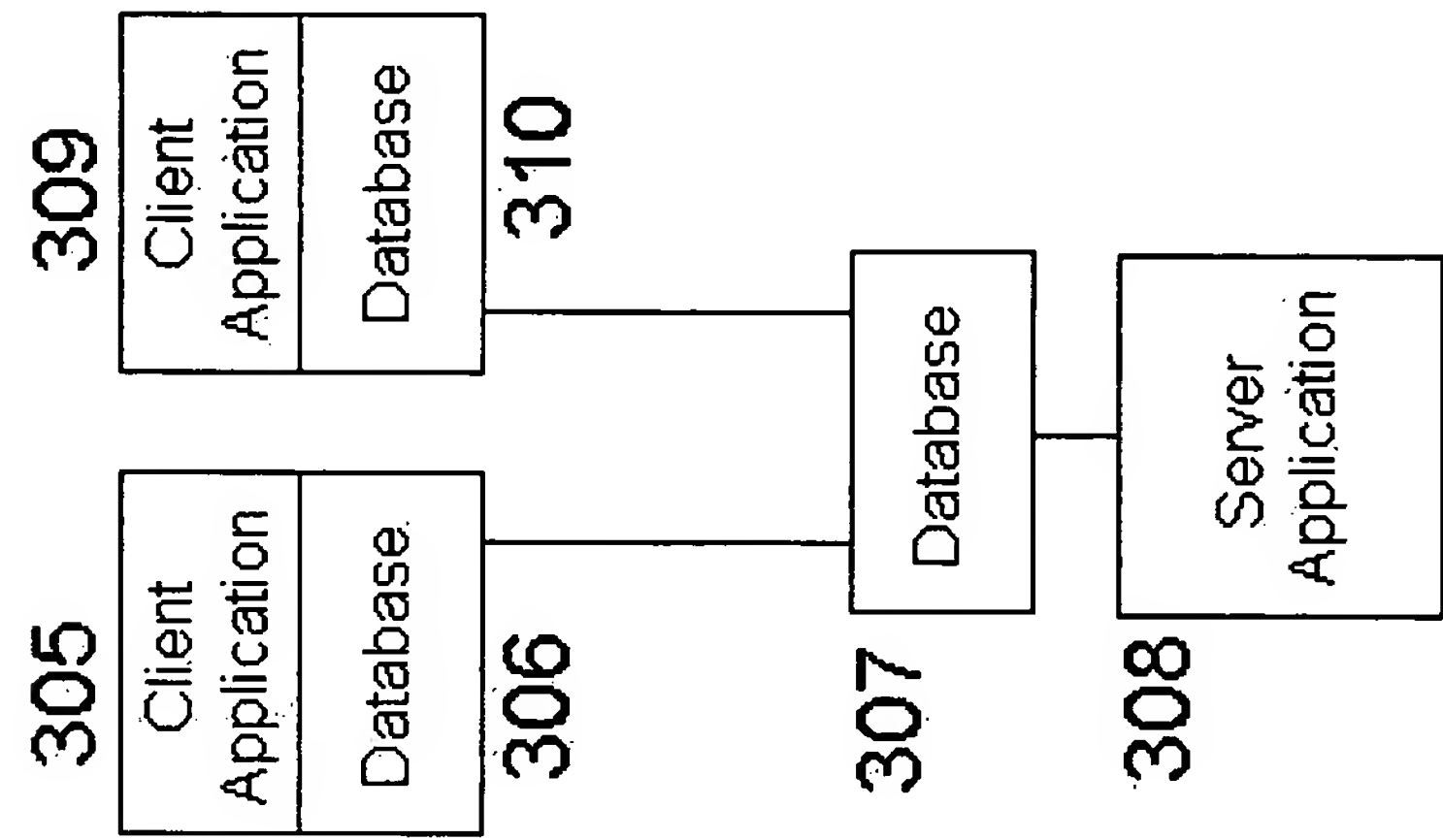


Fig 3(b)

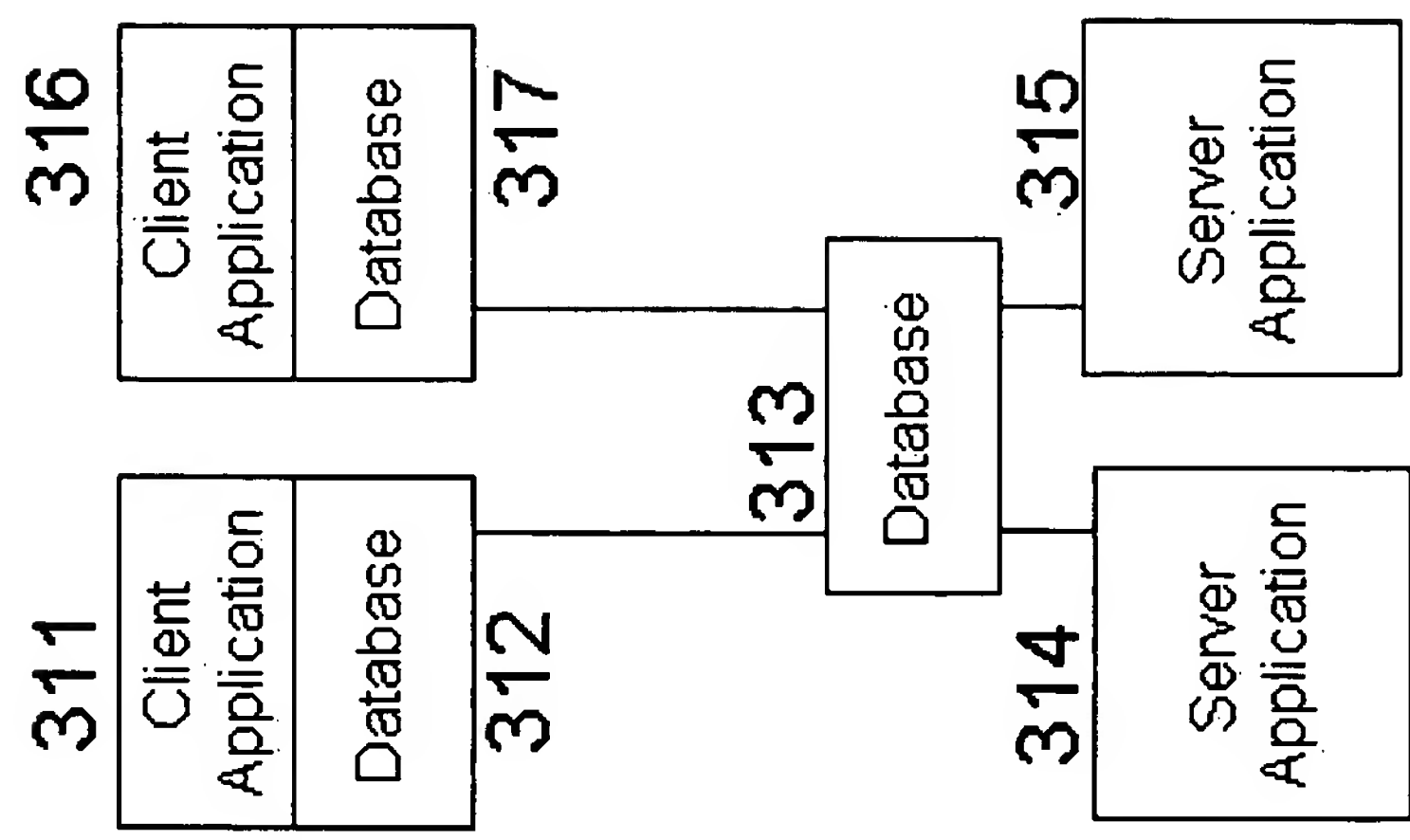


Fig 3(c)

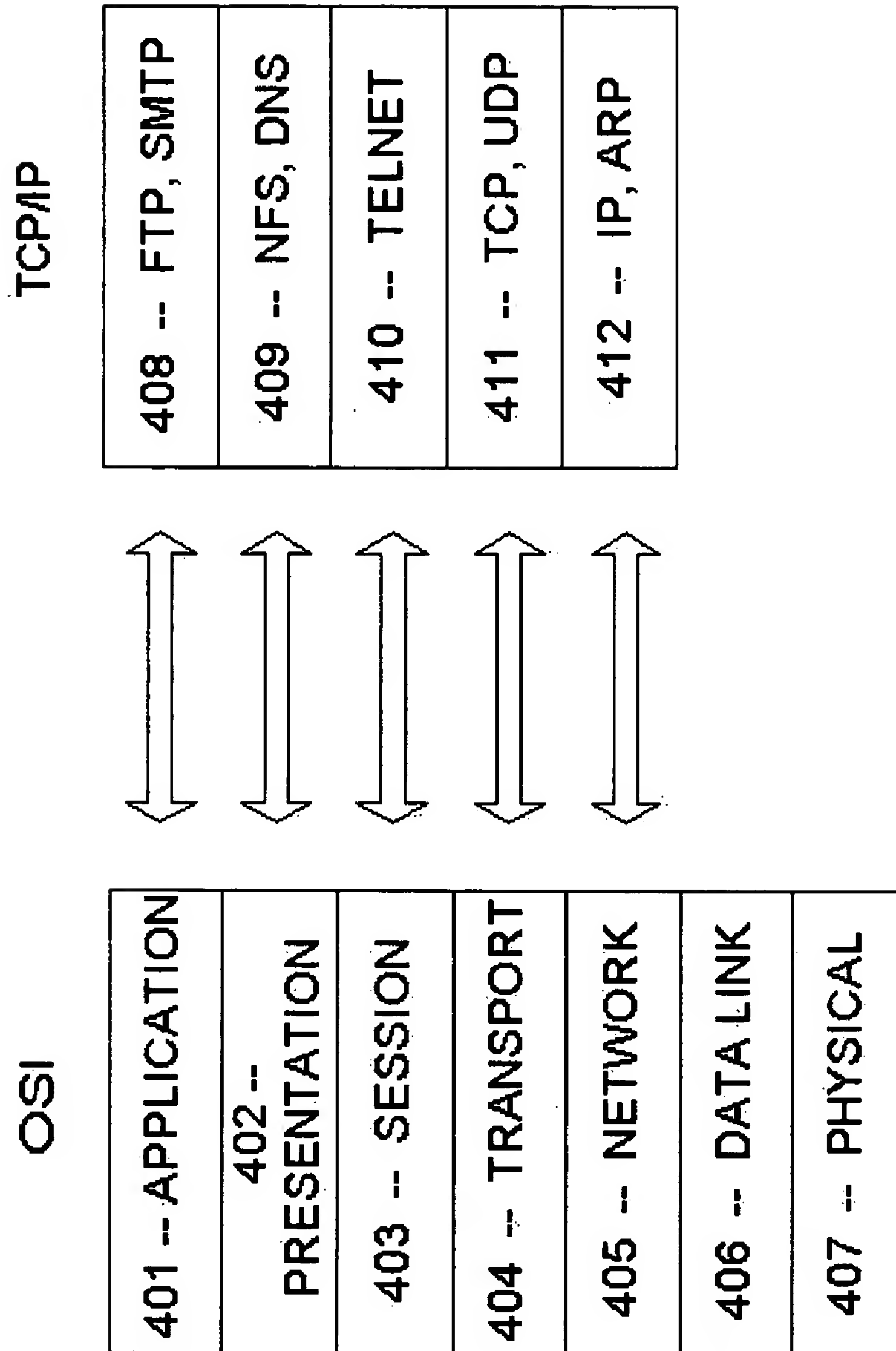


Fig 4(b)

Fig 4(a)

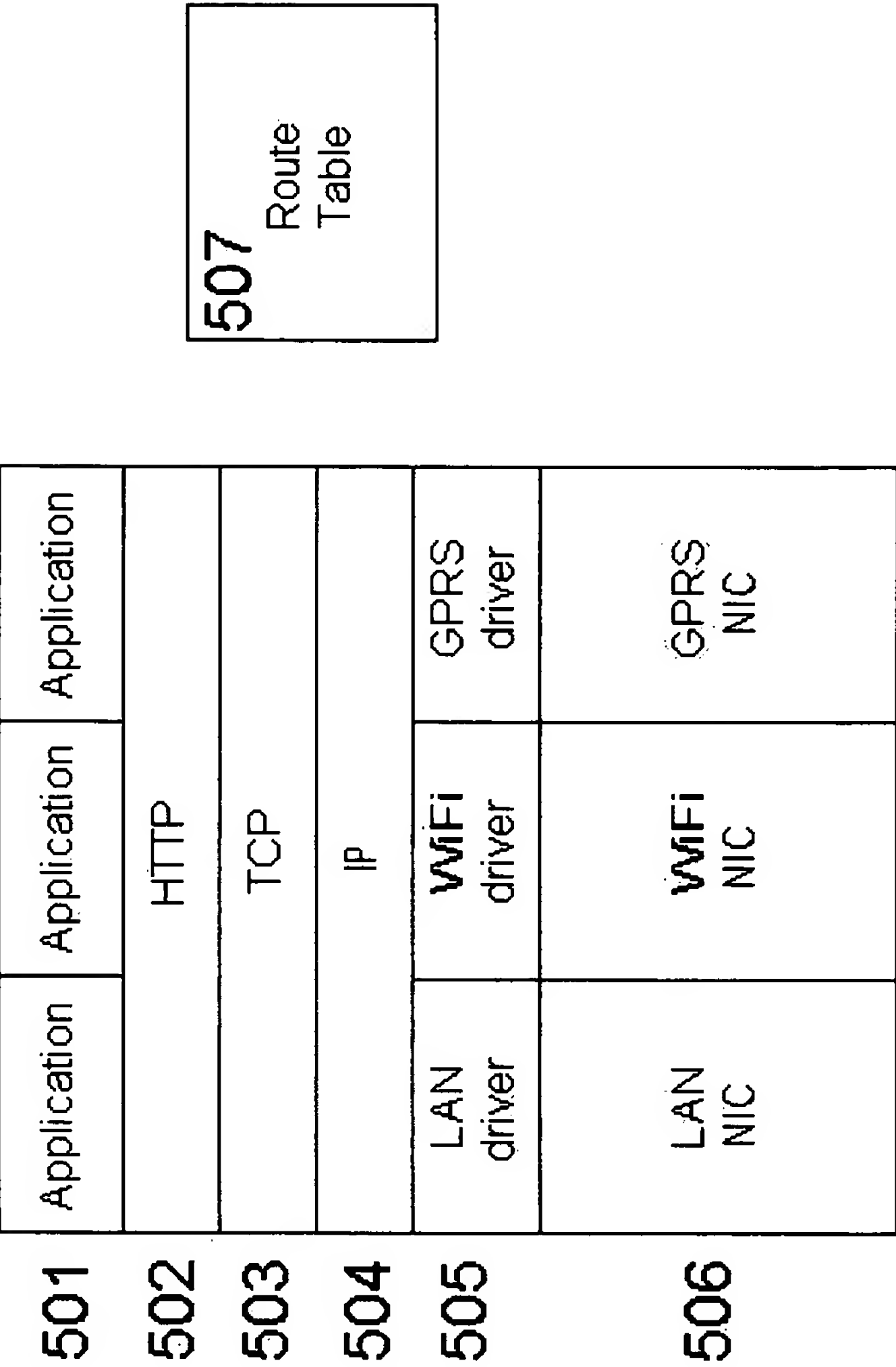


Fig 5

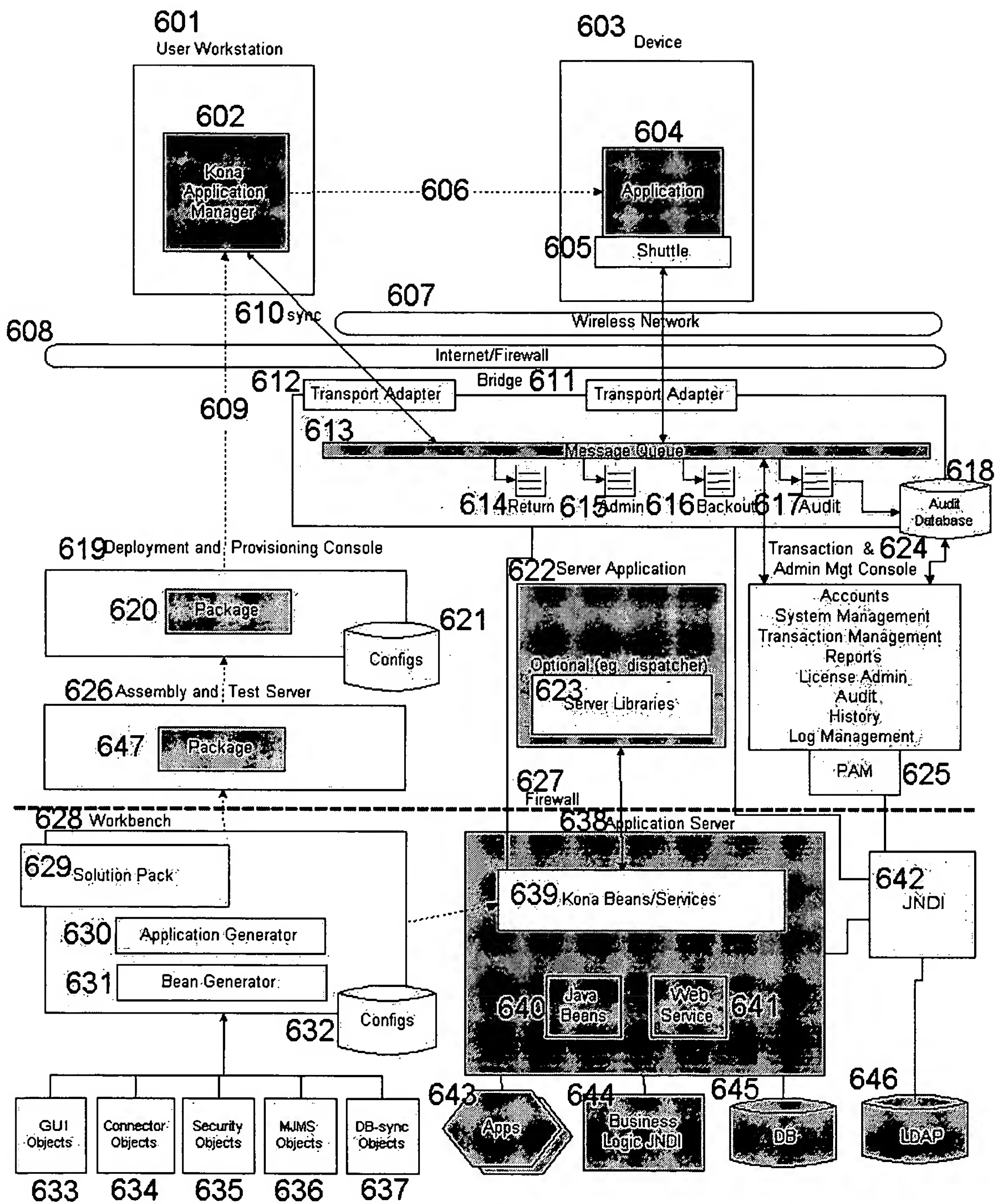
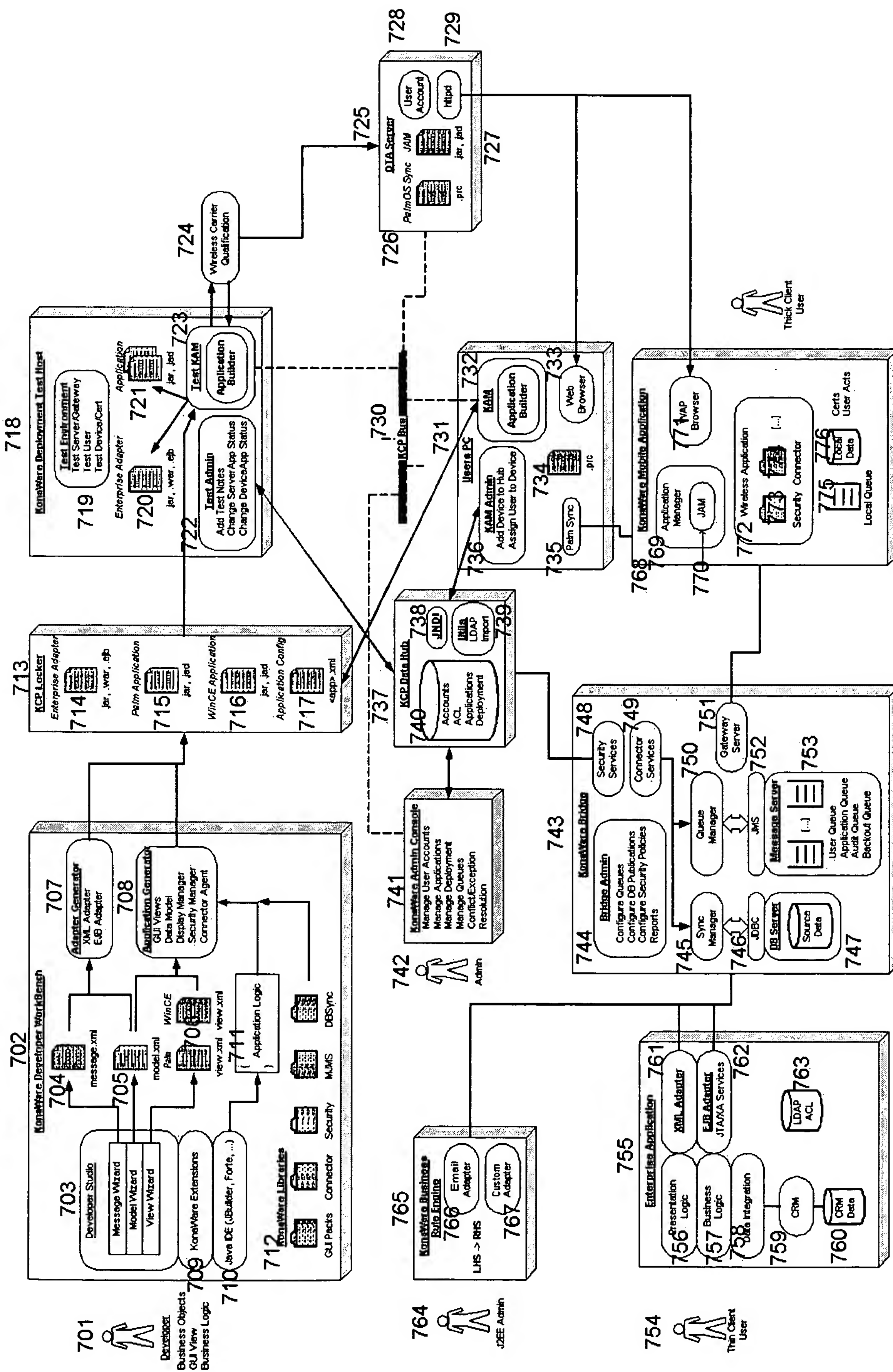


Fig 6



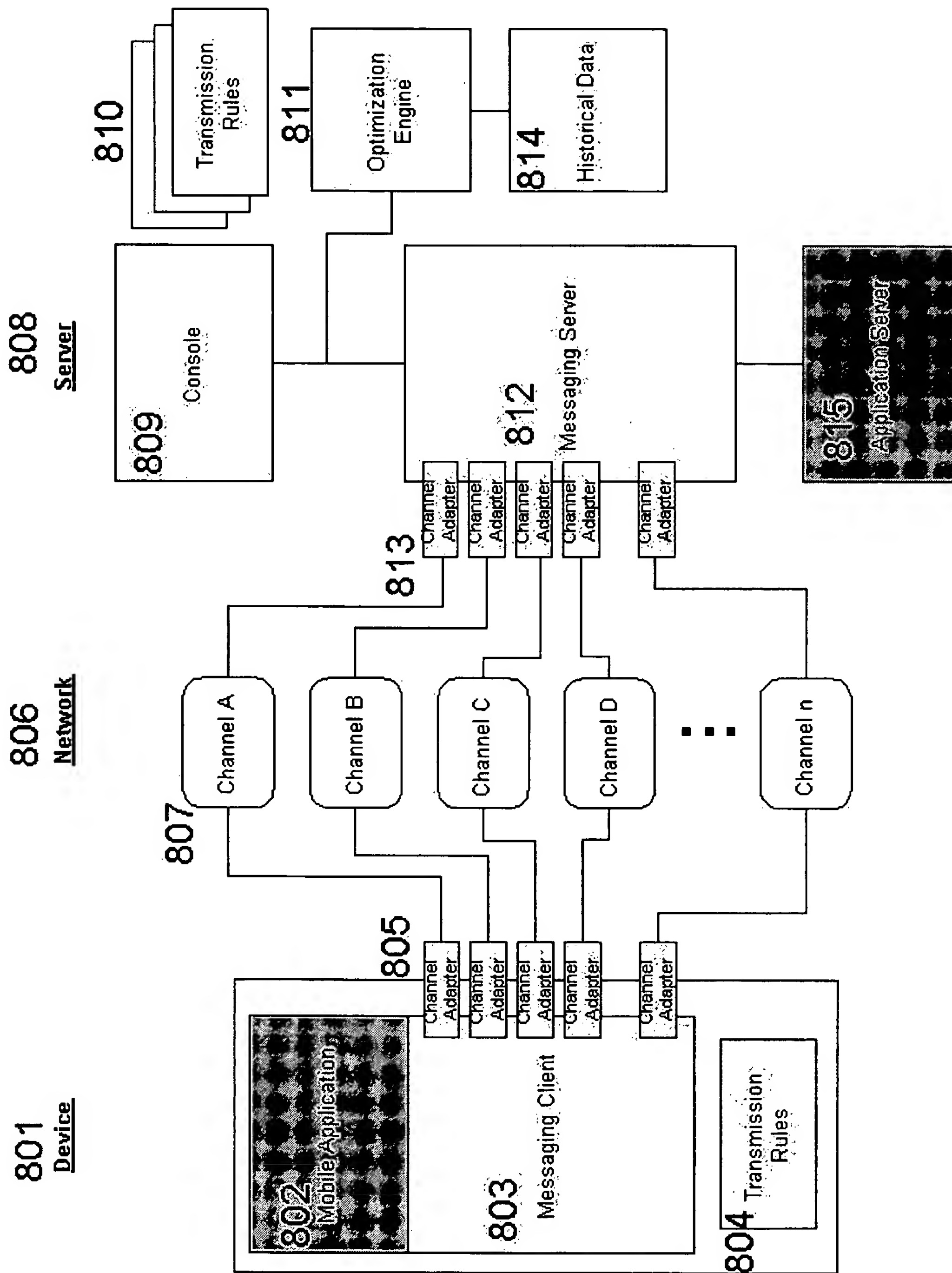


Fig 8

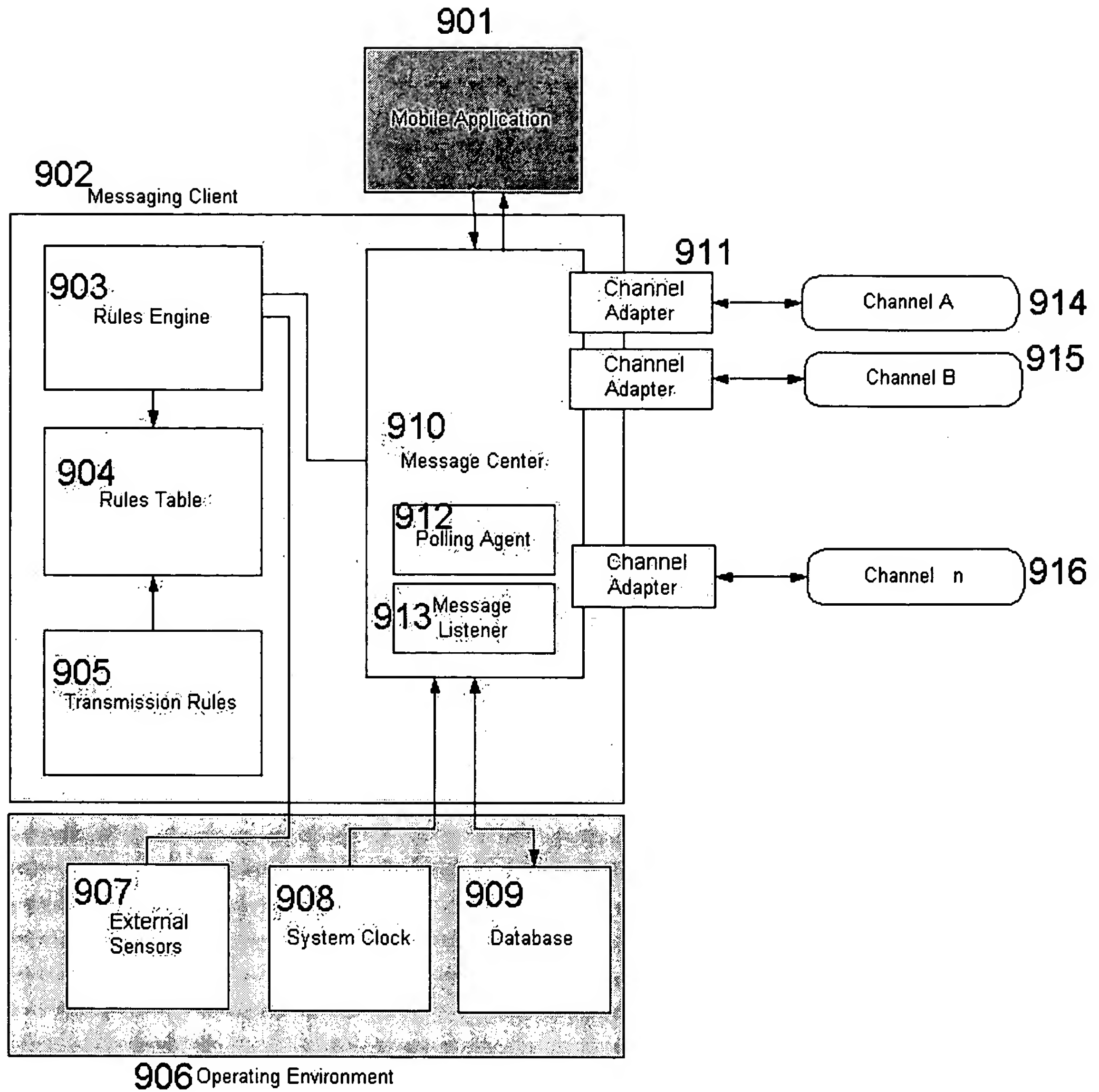


Fig 9

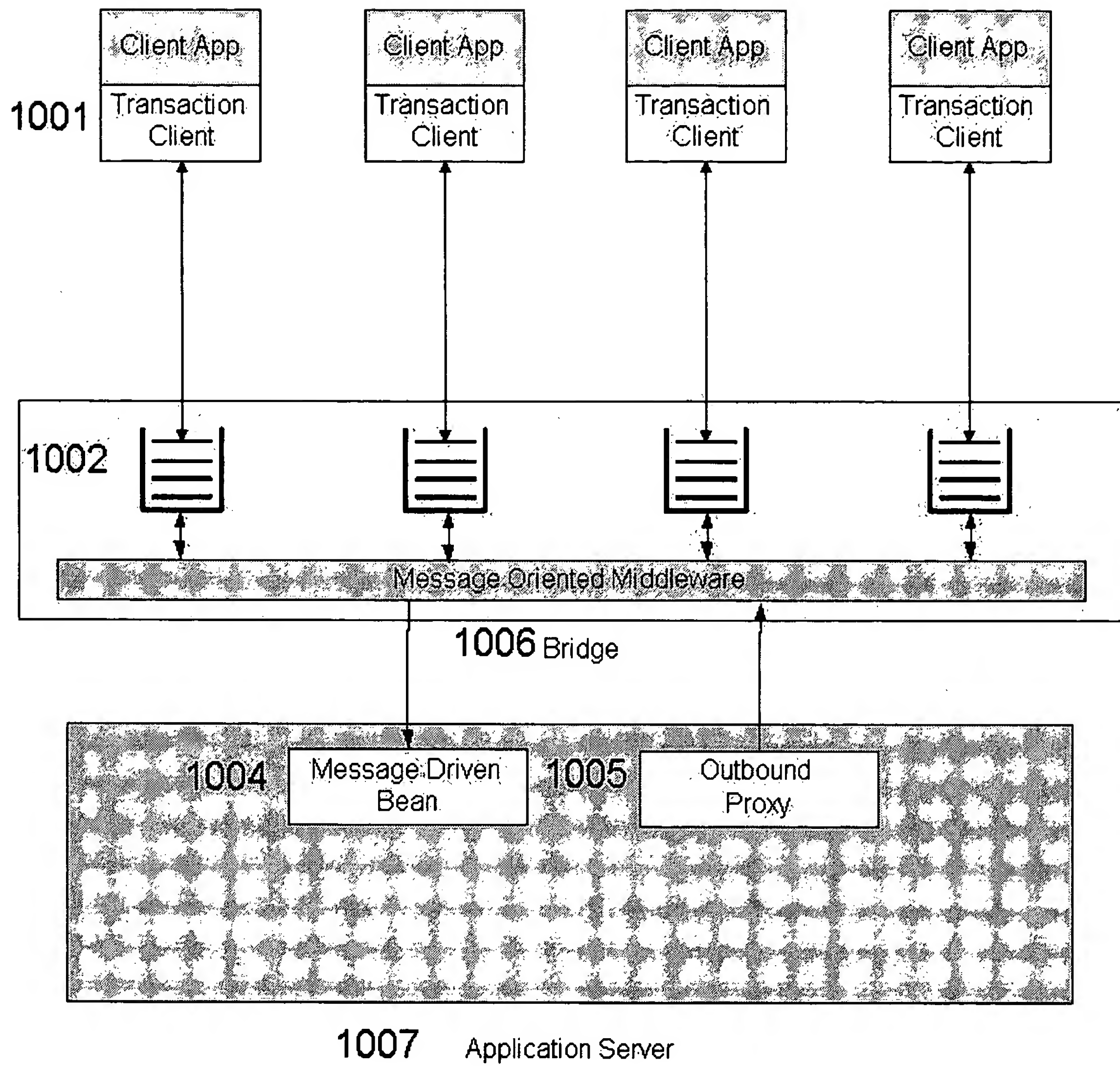


Fig 10

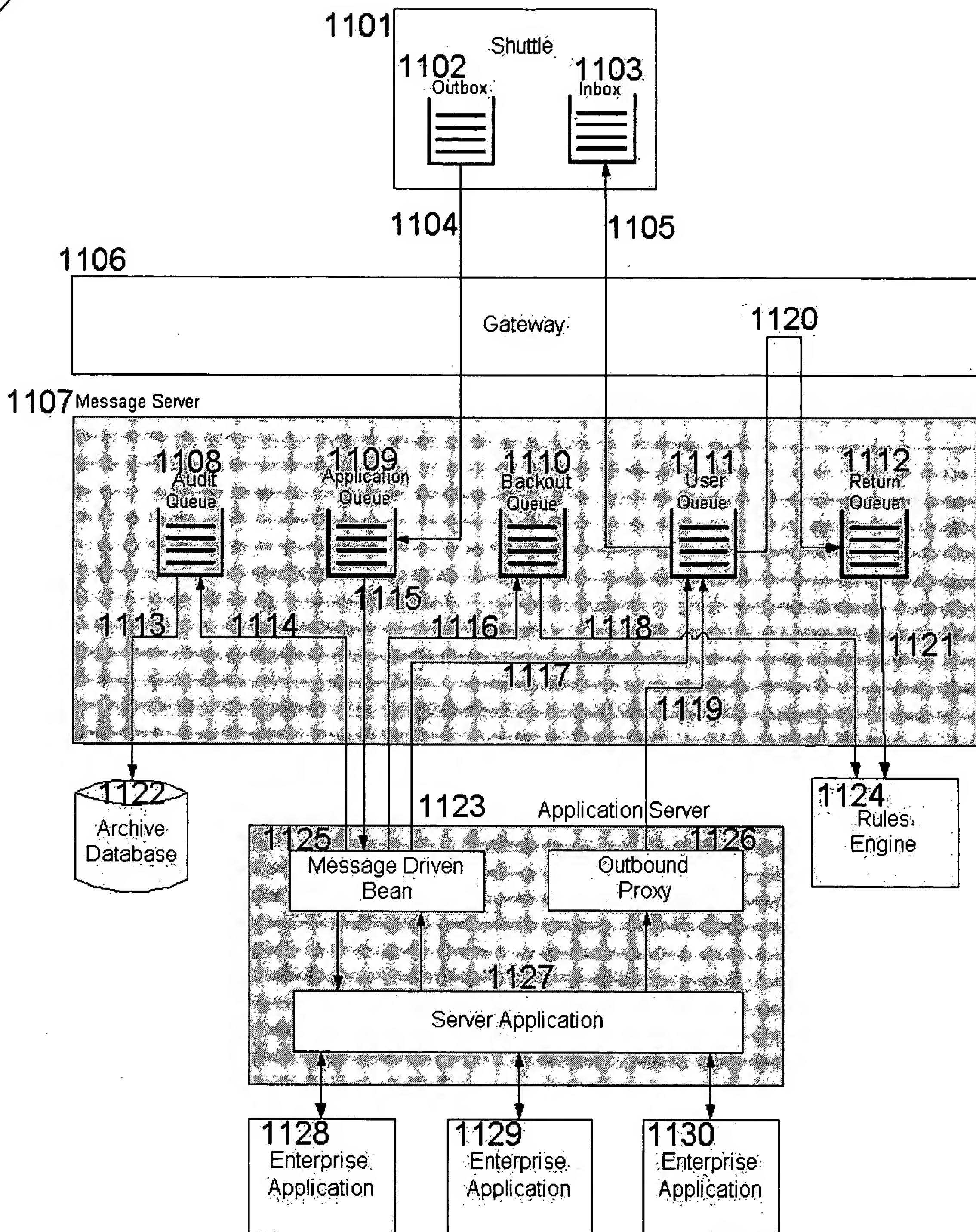


Fig 11

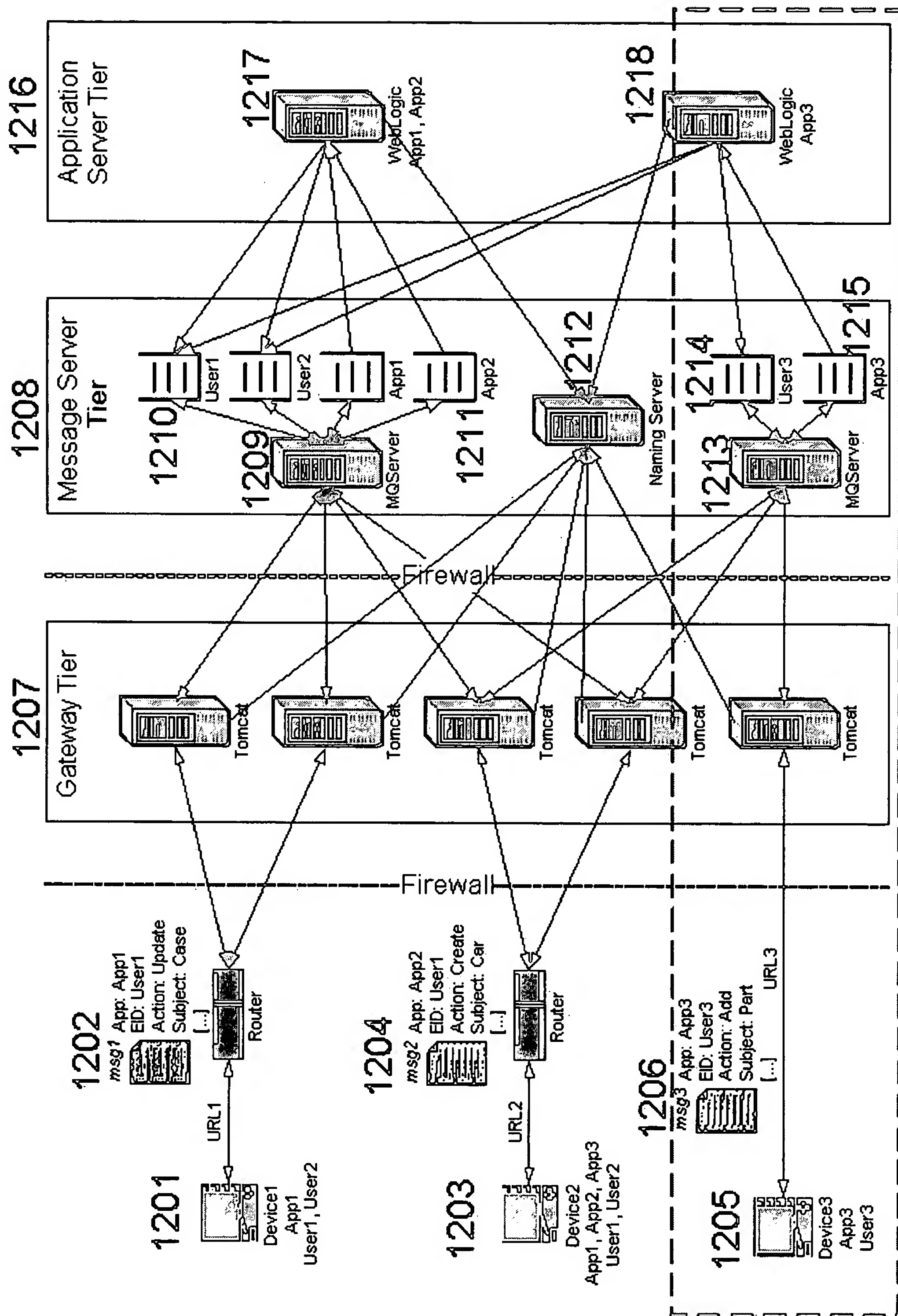


Fig 12

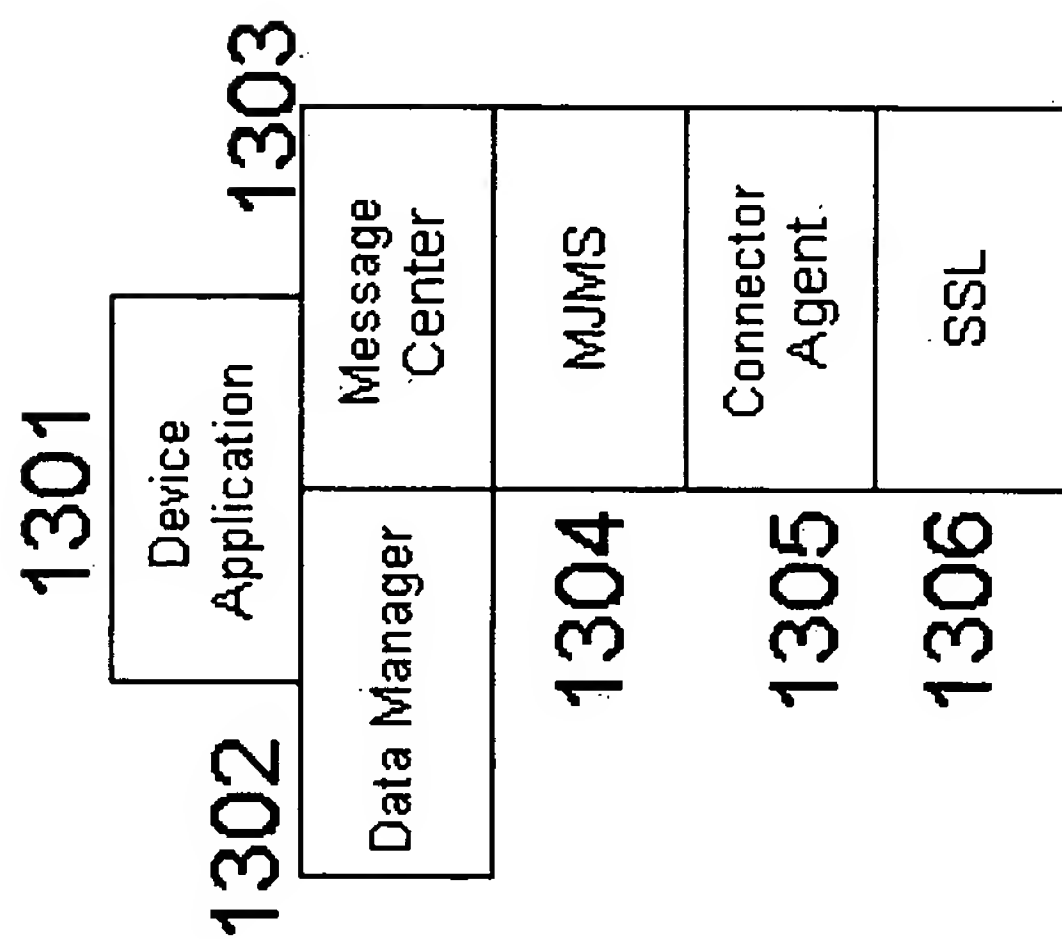
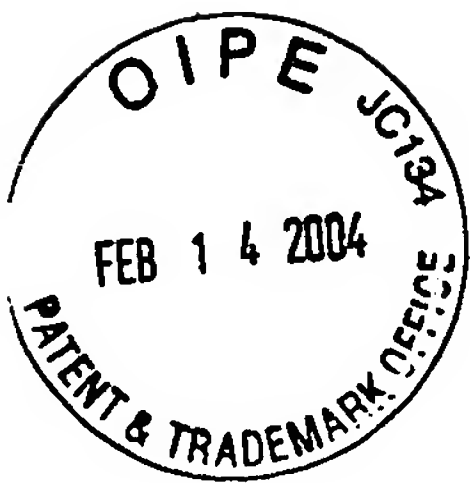


Fig 13(a)

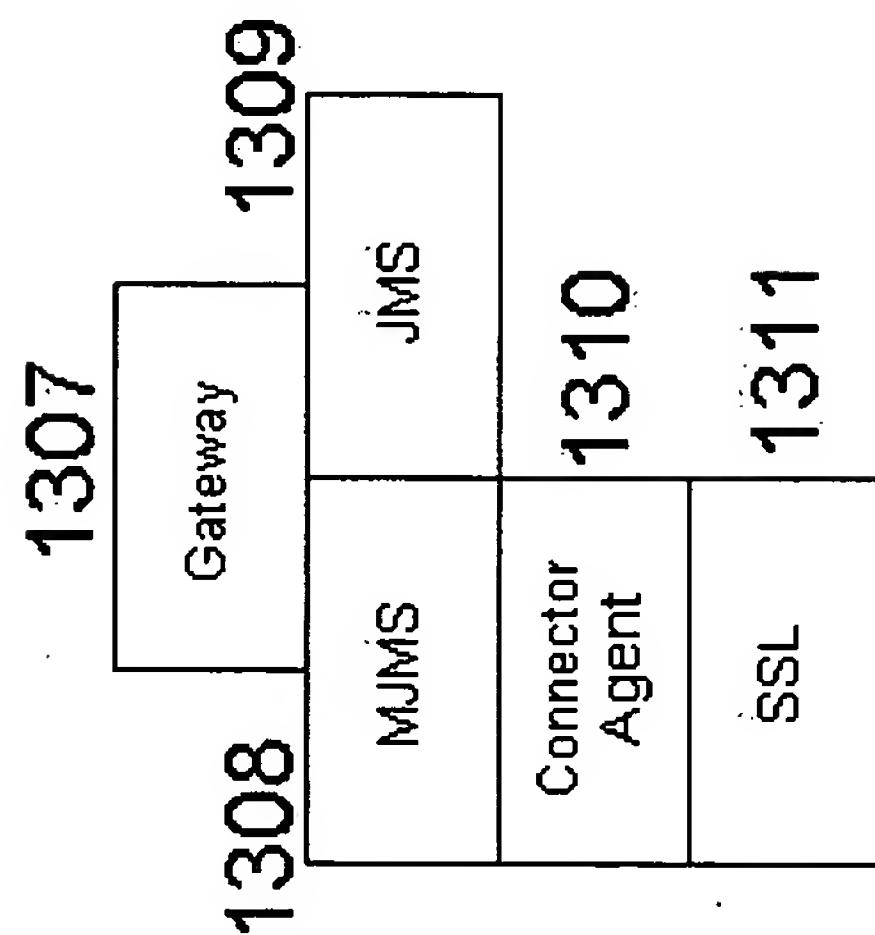


Fig 13(b)

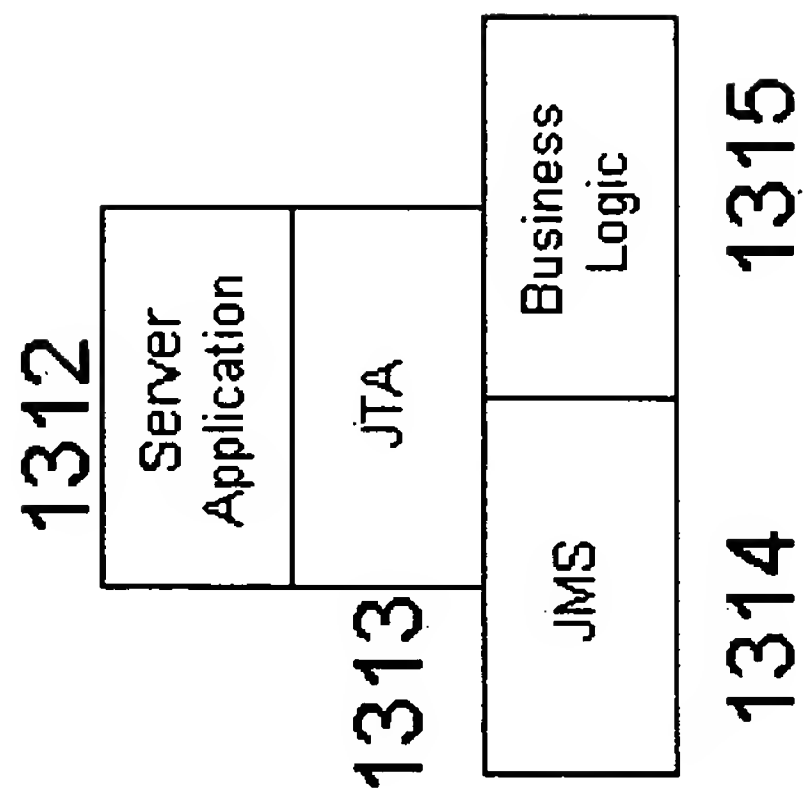


Fig 13(c)

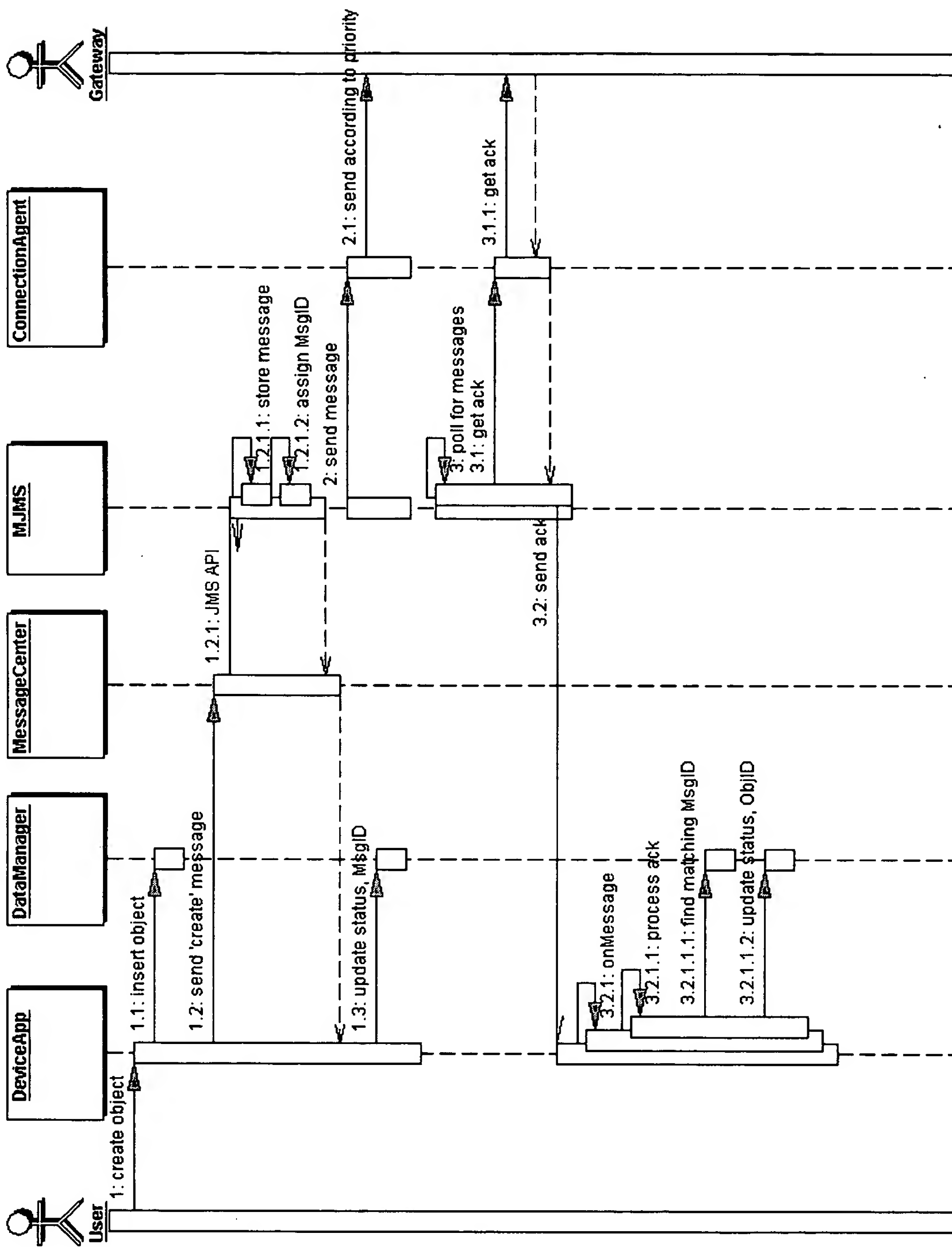


Fig 14

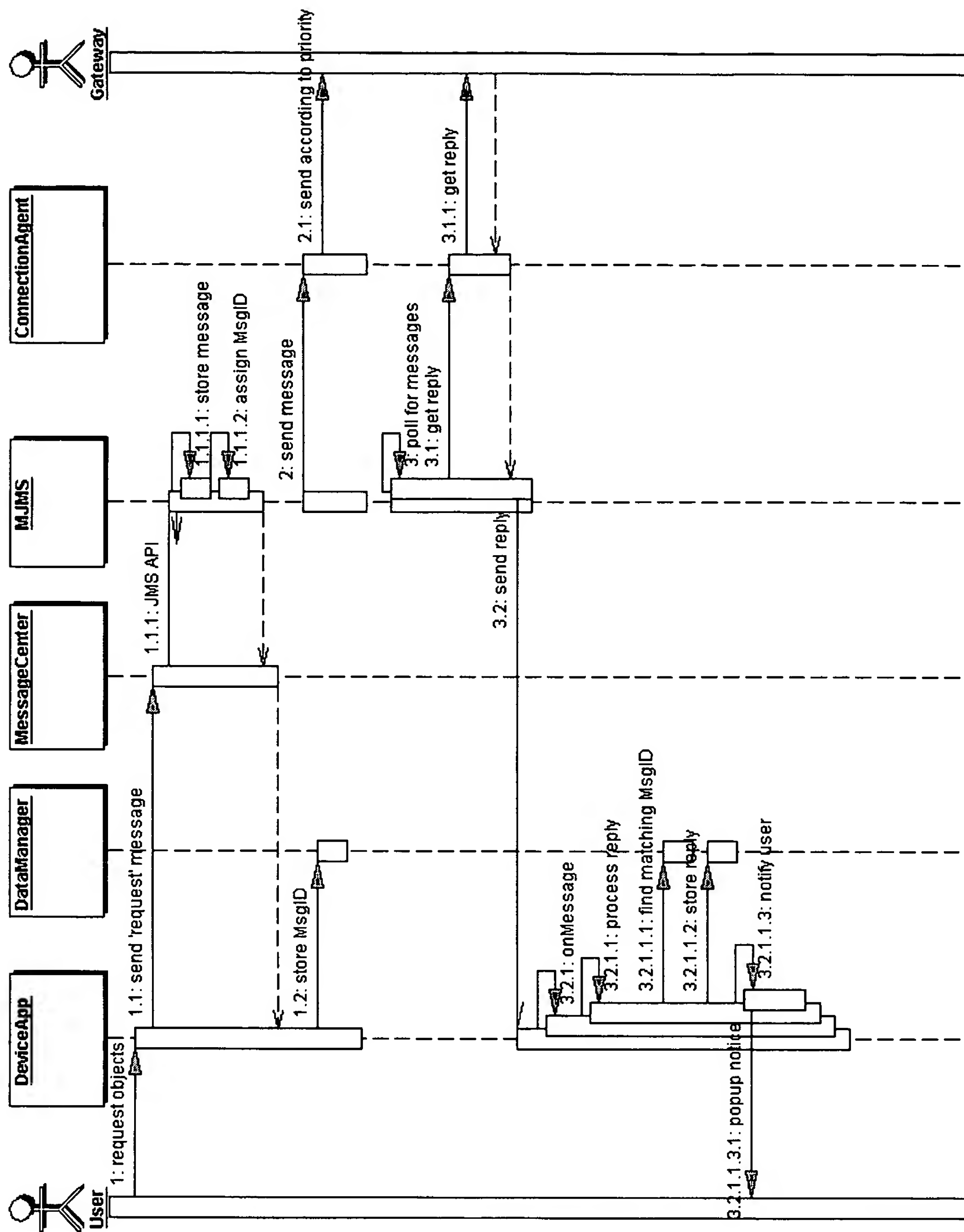


Fig 15

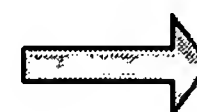


Device

Request Table			
<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsqID</u>	<u>KWTStamp</u>
null	null	0	NOW()

Widget Table							
<u>KWObID</u>	<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsqID</u>	<u>KWTStamp</u>	<u>ObID</u>	<u>Name</u>	<u>Type</u>

Server		
Widget Table		
ObID	Name	Type
0	AA	Red
1	AB	Red
2	BA	Blue
3	BB	Blue
4	CA	Black



```
msg.num=1
msg.islast=true
kw.mid=0
kw.act='d_request'
kw.obj='widget'
kw.uid='jdoe'
kw.aid='wapp_1.0'
kw.did='kw0001'
obj.Type='red'
```

Fig 16



Device

Request Table			
<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsgID</u>	<u>KWTStamp</u>

Widget Table							
<u>KWObjID</u>	<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsgID</u>	<u>KWTStamp</u>	<u>ObjID</u>	<u>Name</u>	<u>Type</u>
0	STABLE				0	AA	Red
1	STABLE				1	AB	Red

Server		
<u>Widget Table</u>		
<u>ObjID</u>	<u>Name</u>	<u>Type</u>
0	AA	Red
1	AB	Red
2	BA	Blue
3	BB	Blue
4	CA	Black

msg.num=1
msg.islast=false
kw.mid=0
kw.act='d_request_reply'
kw.obj='widget'
kw.uid='jdoe'
kw.aid='wapp_1.0'
kw.did='kw0001'
obj.ObjID='0'
obj.Name='AA'
obj.Type='Red'

msg.num=2
msg.islast=true
kw.mid=0
kw.act='d_request_reply'
kw.obj='widget'
kw.uid='jdoe'
kw.aid='wapp_1.0'
kw.did='kw0001'
obj.ObjID='1'
obj.Name='AB'
obj.Type='Red'

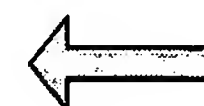


Fig 17



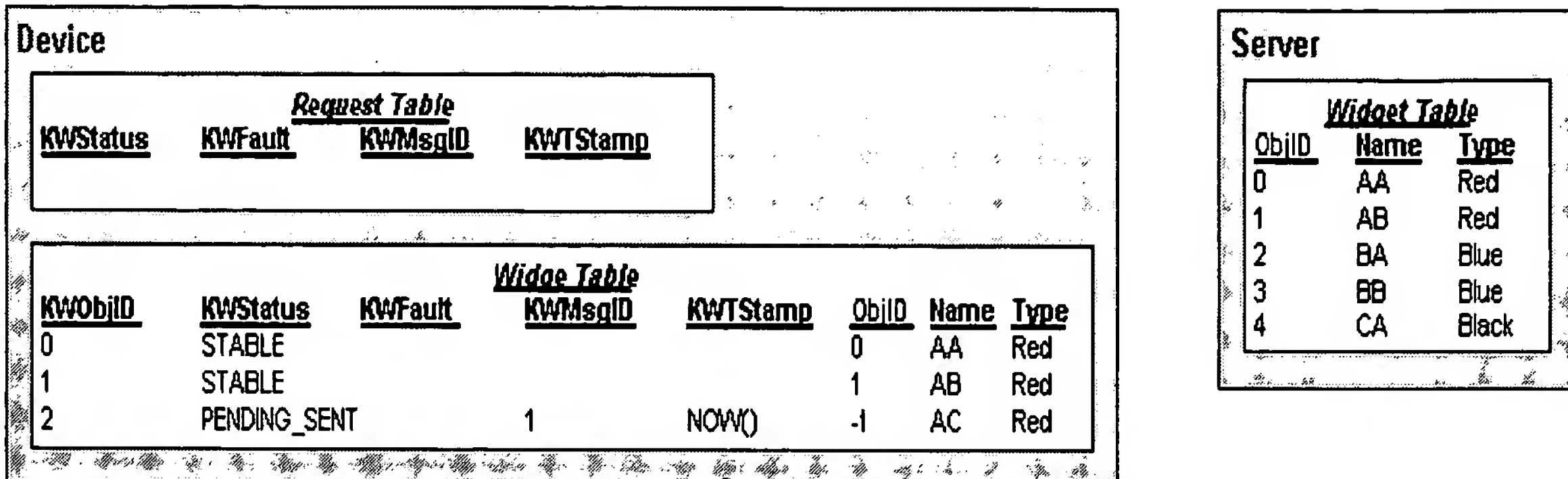
Device

<u>Request Table</u>			
<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsgID</u>	<u>KWTStamp</u>

<u>Widget Table</u>							
<u>KWObjID</u>	<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsgID</u>	<u>KWTStamp</u>	<u>ObjID</u>	<u>Name</u>	<u>Type</u>
0	STABLE				0	AA	Red
1	STABLE				1	AB	Red
2	PENDING_CREATE				-1	AC	Red

Server		
<u>Widget Table</u>		
<u>ObjID</u>	<u>Name</u>	<u>Type</u>
0	AA	Red
1	AB	Red
2	BA	Blue
3	BB	Blue
4	CA	Black

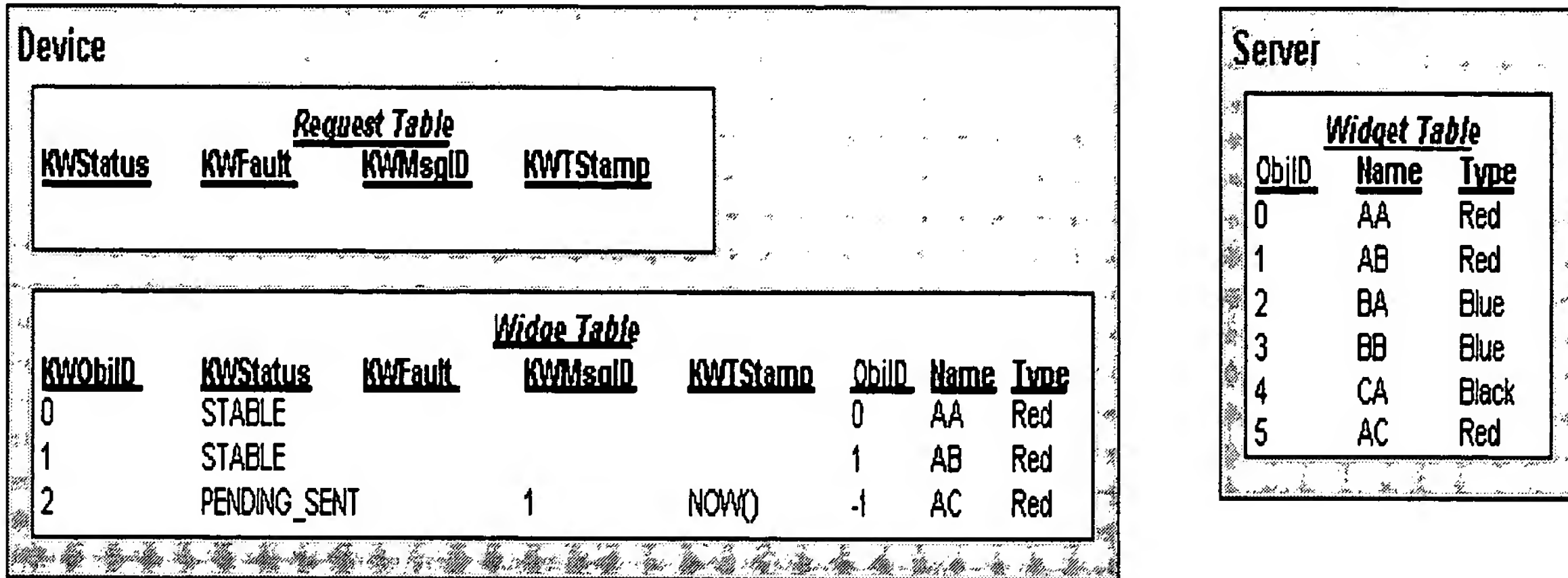
Fig 18



→

```
msg.num=1
msg.islast=true
kw.mid=1
kw.act='d_create'
kw.obj='widget'
kw.uid='jdoe'
kw.aid='wapp_1.0'
kw.did='kw0001'
obj.ObjID='-1'
obj.Name='AC'
obj.Type='Red'
```

Fig 19



msg.num=1
msg.islast=true
kw.mid=1
kw.act='d_create_ack'
kw.obj='widget'
kw.uid='jdoe'
kw.aid='wapp_1.0'
kw.did='kw0001'
obj.ObjID='5'

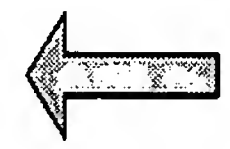
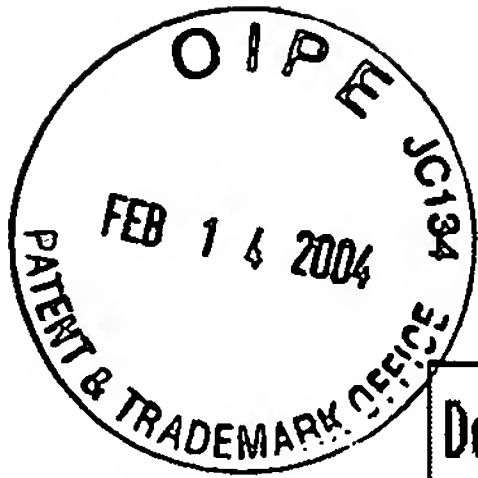


Fig 20



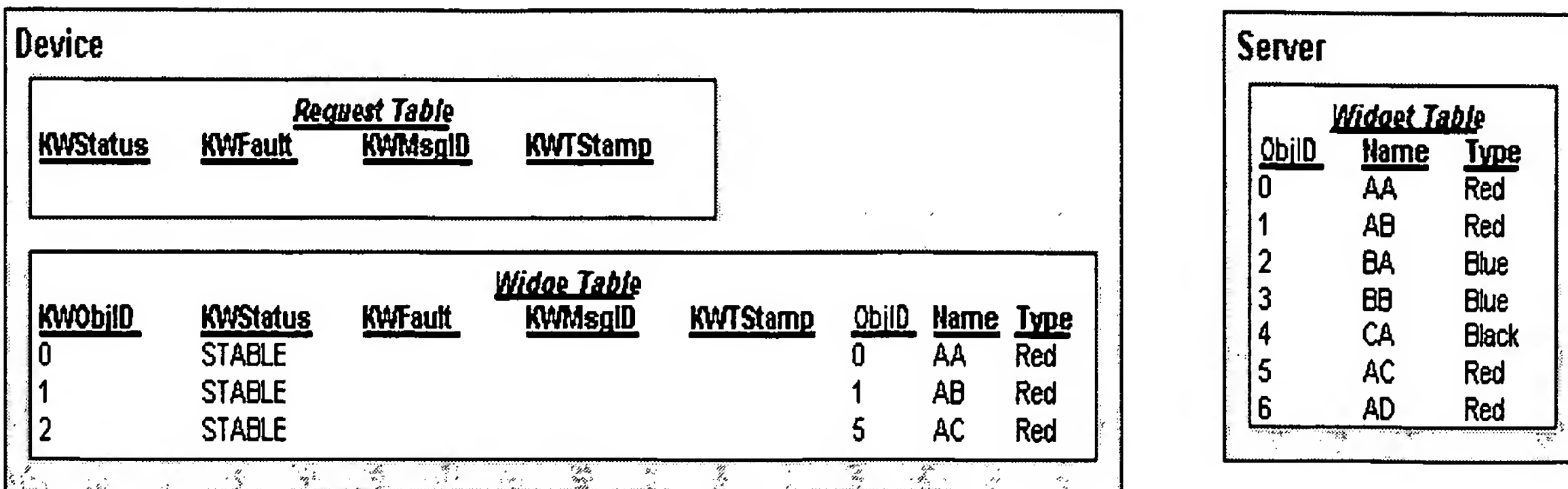
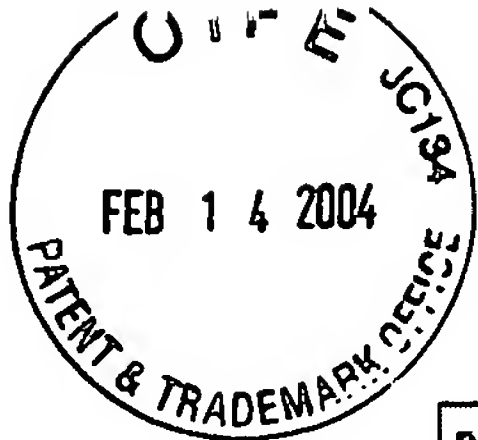
Device

<u>Request Table</u>			
<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsgID</u>	<u>KWTStamp</u>

<u>Widget Table</u>							
<u>KWObjID</u>	<u>KWStatus</u>	<u>KWFault</u>	<u>KWMsgID</u>	<u>KWTStamp</u>	<u>ObjID</u>	<u>Name</u>	<u>Type</u>
0	STABLE				0	AA	Red
1	STABLE				1	AB	Red
2	STABLE				5	AC	Red

Server		
<u>Widget Table</u>		
<u>ObjID</u>	<u>Name</u>	<u>Type</u>
0	AA	Red
1	AB	Red
2	BA	Blue
3	BB	Blue
4	CA	Black
5	AC	Red

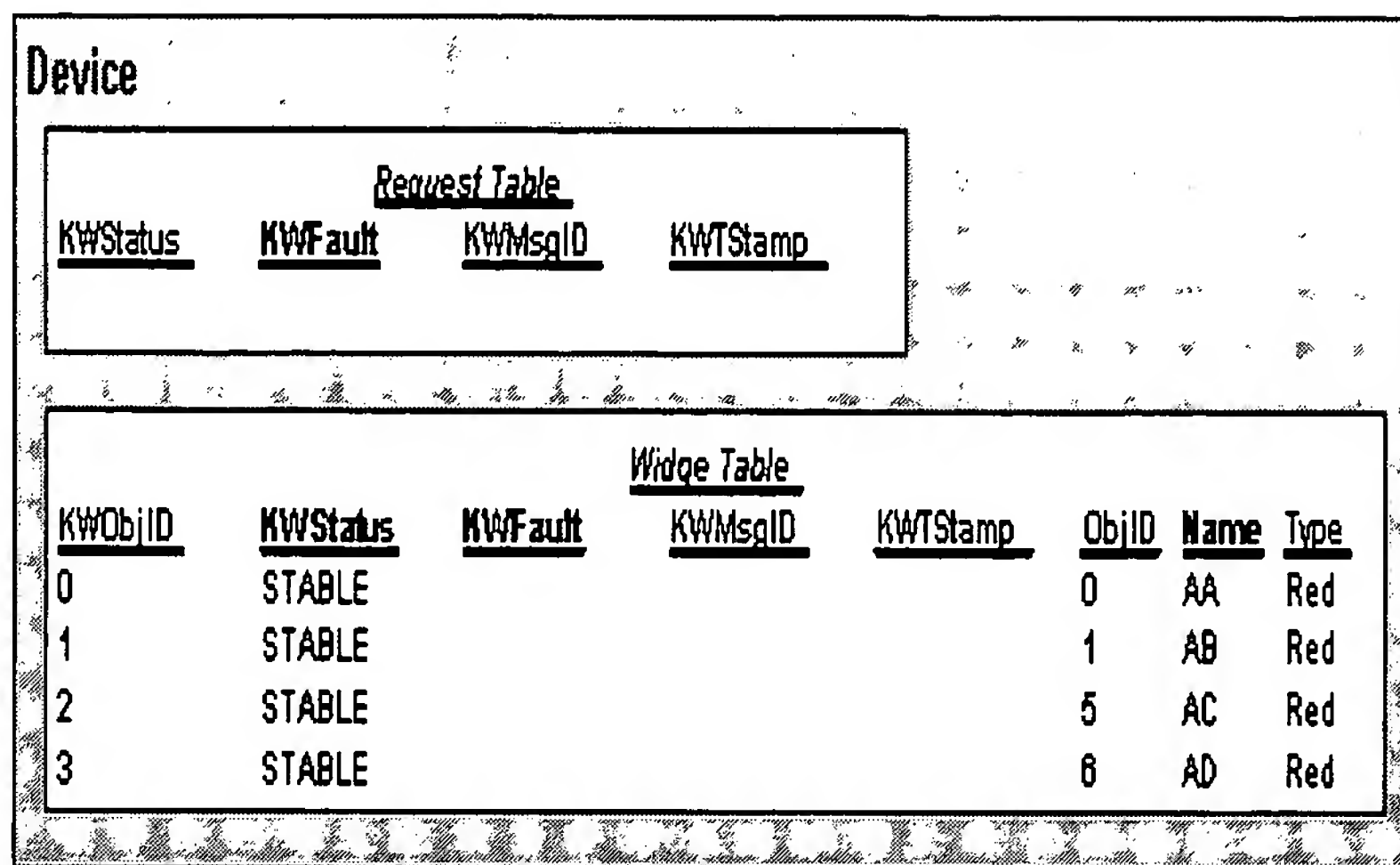
Fig 21



msg.num=1
msg.islast=true
kw.mid=s1
kw.act='s_create'
kw.obj='widget'
kw.uid='jdoe'
kw.aid='wapp_1.0'
kw.did=null
obj.ObjID='6'
obj.Name='AD'
obj.Type='Red'



Fig 22



Server

<u>ObjId</u>	<u>Name</u>	<u>Type</u>
0	AA	Red
1	AB	Red
2	BA	Blue
3	BB	Blue
4	CA	Black
5	AC	Red
6	AD	Red

Fig 23

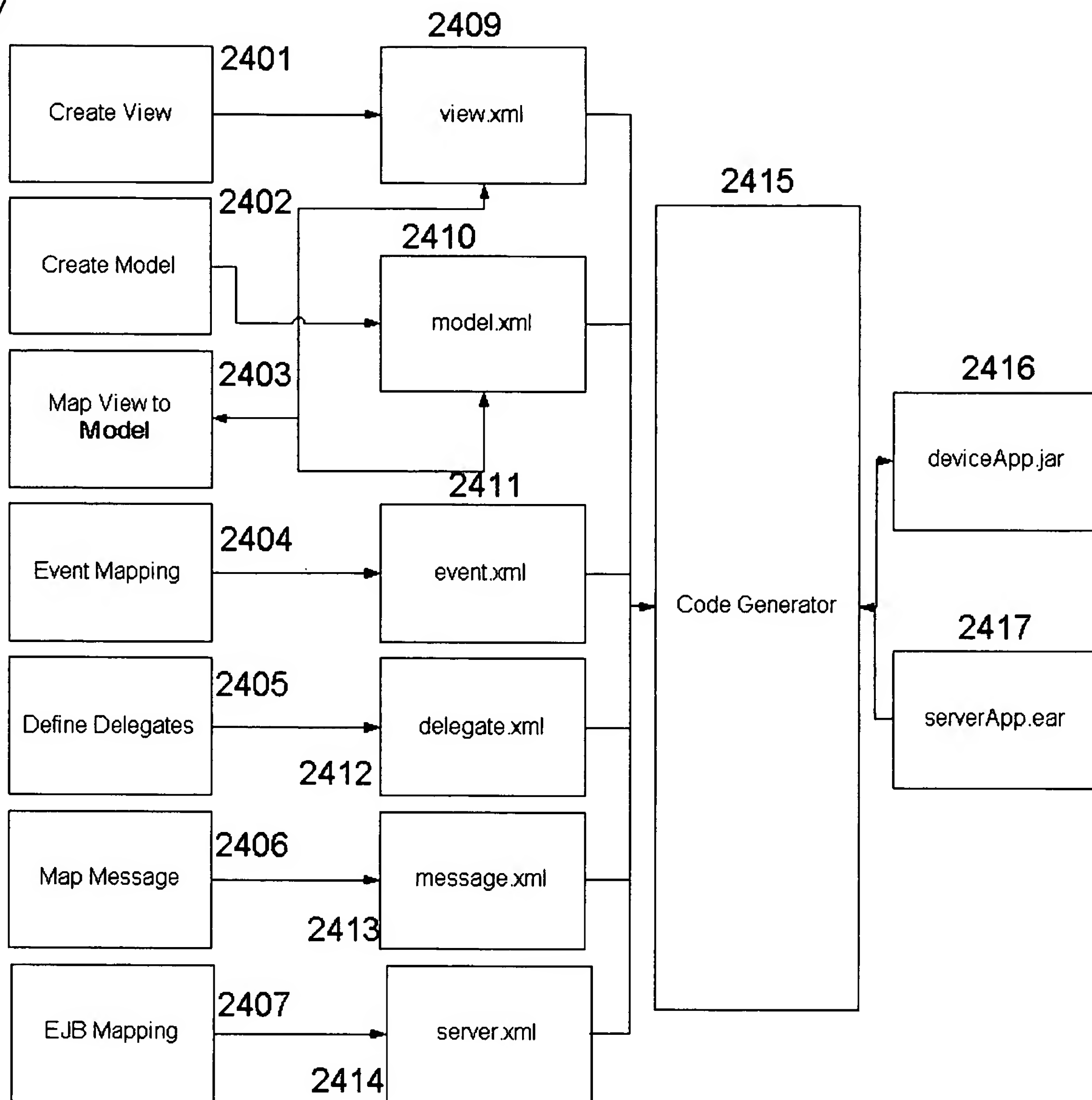


Fig 24

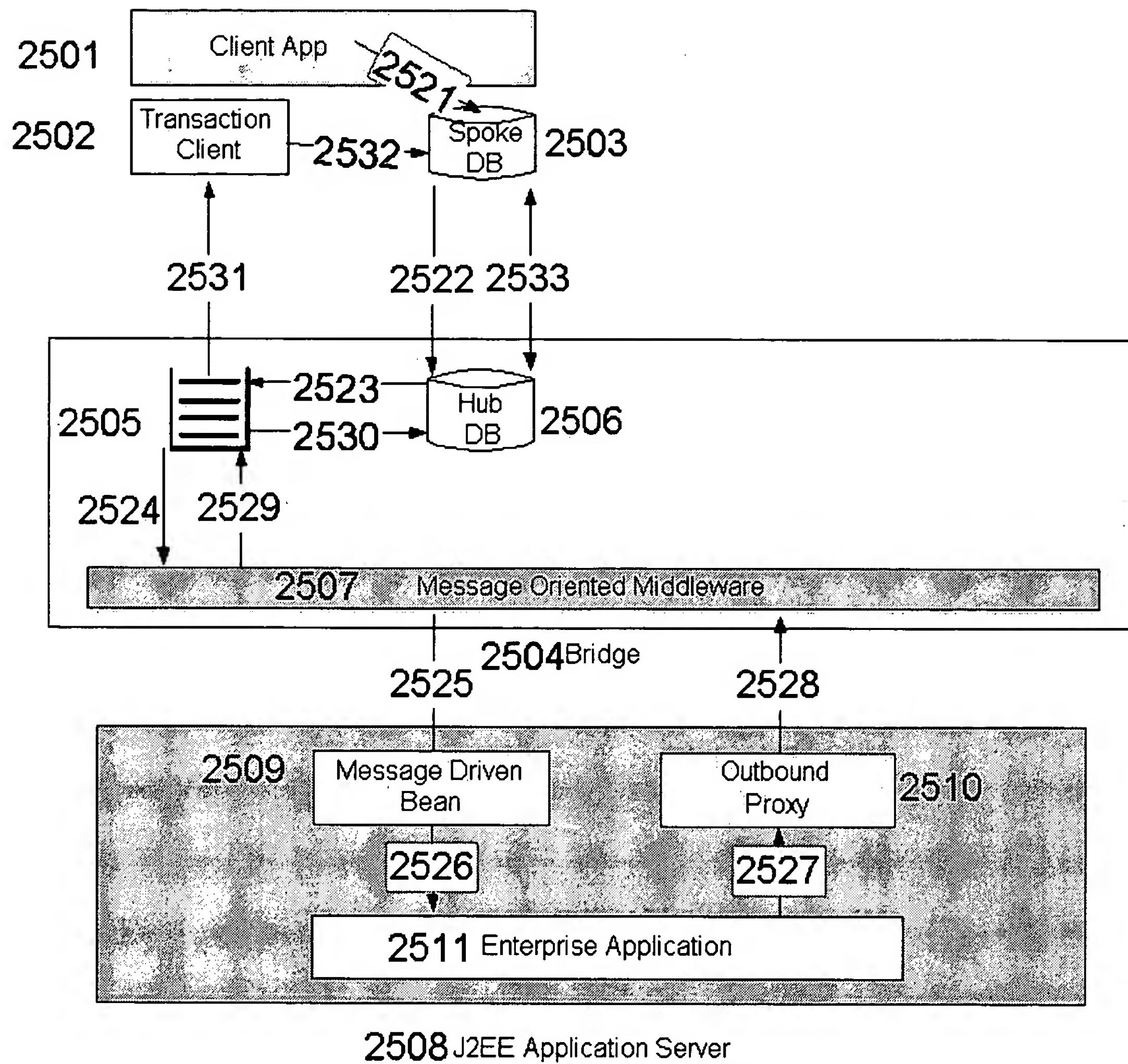


Fig 25

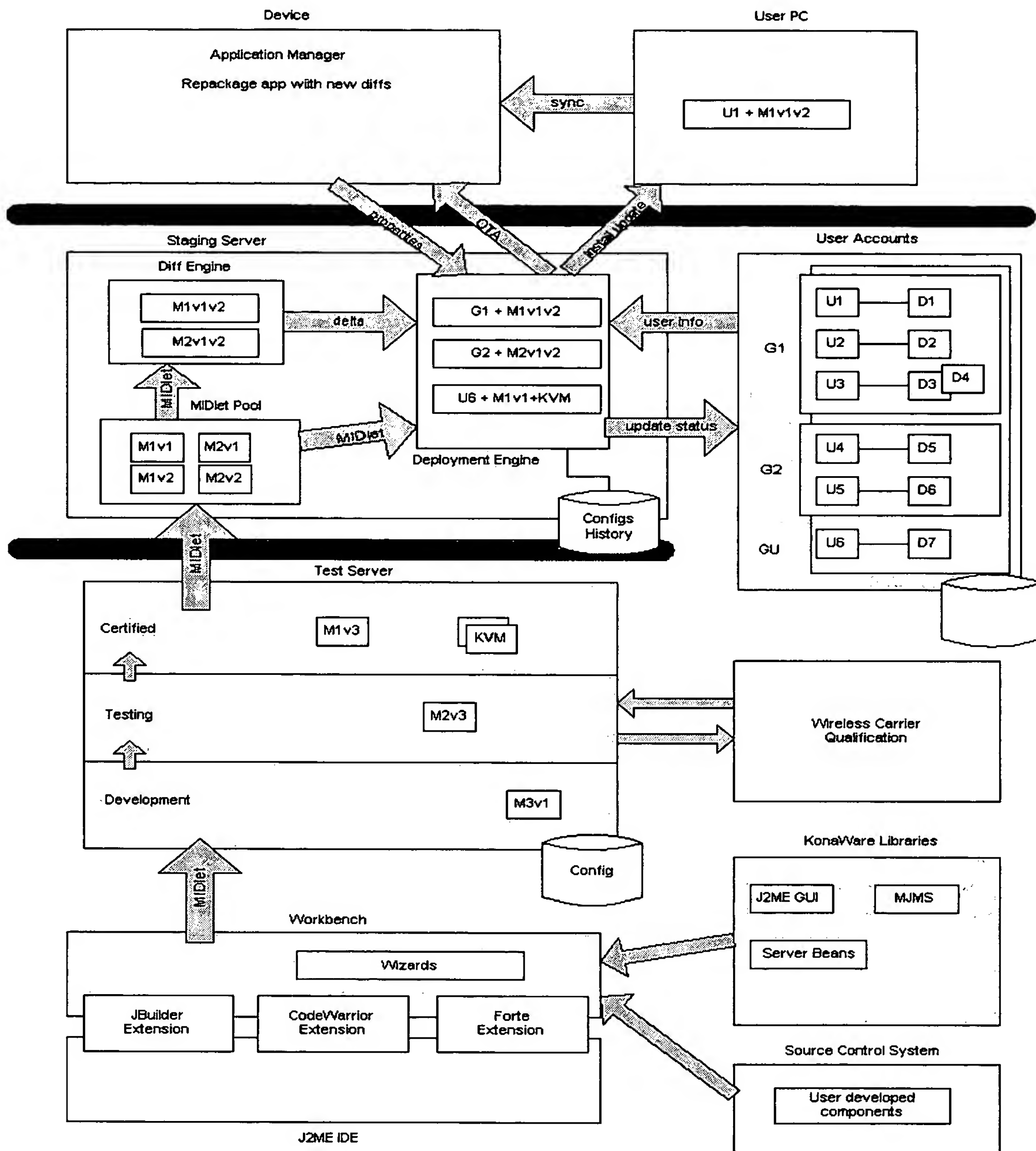


Fig 26

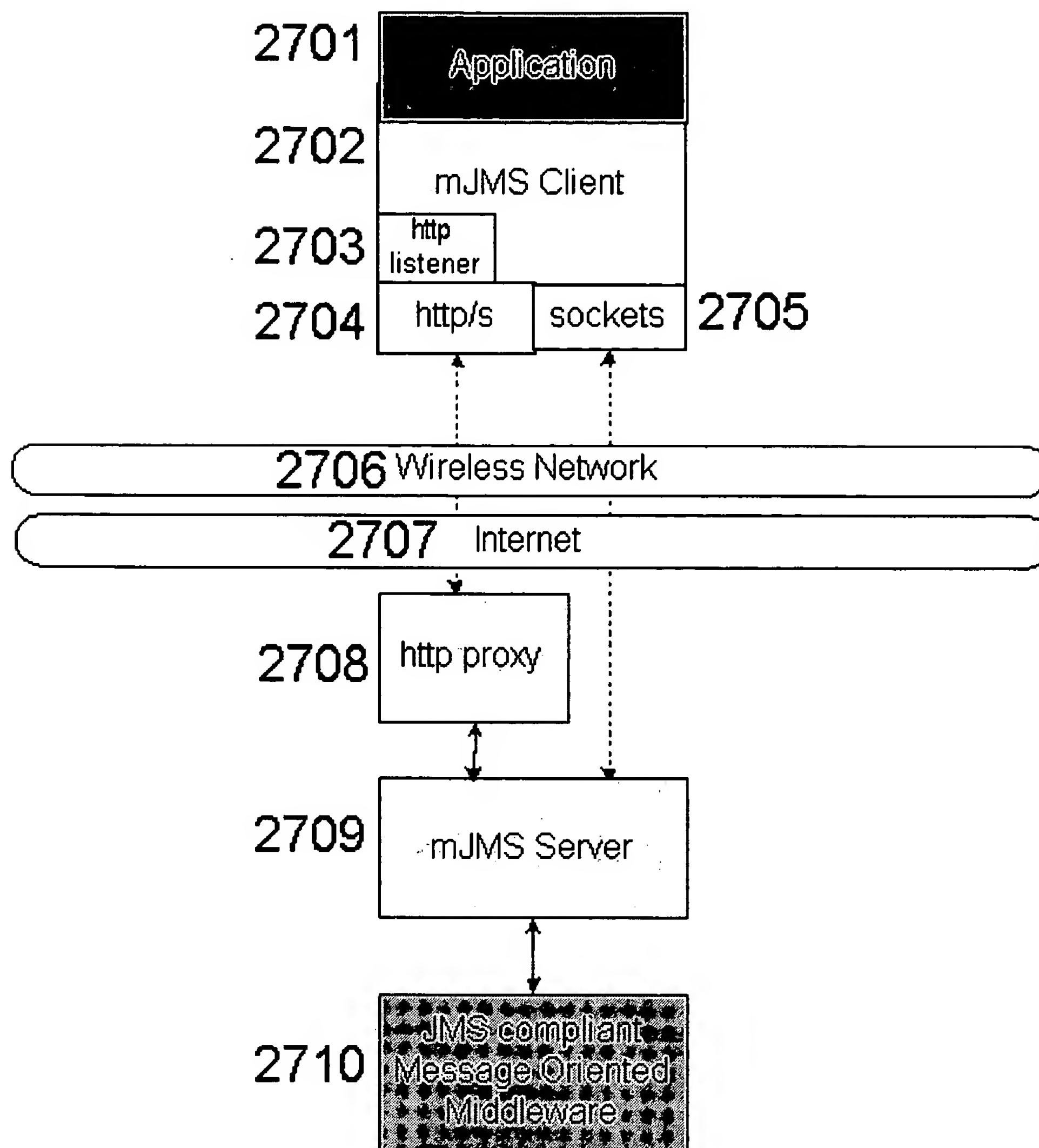


Fig 27